Application No.: 10/801,207

Reply to Office Action mailed March 20, 2008

Page 2 of 9

## Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application:

## Claim Listing:

- 1. (Currently Amended) A method for identifying a compound that inhibits <del>p21-induced</del> <u>p21-mediated induction of</u> senescence-associated changes in cellular gene expression in a mammalian cell, the method comprising the steps of:
  - (a) treating the mammalian cell in the presence and absence of the compound with an agent that induces <u>p21 expression and p21-induced mediated induction of senescence</u>, or culturing the mammalian cell in the presence and absence of the compound under conditions that induce <u>p21 expression and p21-induced mediated induction of senescence</u>;
  - (b) assaying the mammalian cell in the presence of p21 expression in which p21 expression has been induced in step (a) for induction or repression of expression of a cellular gene by p21 gene expression; and
  - (c) identifying the compound as an inhibitor of p21-induced induction or repression of senescence-associated changes in cellular gene expression by p21 if the gene induced or repressed by p21 is induced or repressed to a lesser extent; in the presence of the compound than in the absence of the compound.
- 2. (Canceled)
- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Currently amended) The method of claim 1, wherein expression of the cellular gene is detected assayed using an immunological reagent.
- 7. (Currently amended) The method of claim 1, wherein expression of the cellular gene is detected assayed by assaying for an activity of the cellular gene product.

Application No.: 10/801,207

Reply to Office Action mailed March 20, 2008

Page 3 of 9

8. (Currently amended) The method of claim 1, wherein expression of the cellular gene is detected assayed by hybridization of cellular RNA to a nucleic acid complementary to the cellular gene.

## 9.-25. (Canceled)

- 26. (Currently amended) A method for identifying a compound that promotes <del>p21-induced</del> <u>p21-mediated induction of</u> senescence-associated changes in cellular gene expression in a mammalian cell, the method comprising the steps of:
  - (a) treating the mammalian cell with an agent that induces <u>p21 expression and</u> p21-<u>mediated induced induction of</u> senescence in the presence or absence of the compound or culturing the mammalian cell under conditions that induce p21-induced senescence in the presence and absence of the compound;
  - (b) assaying the mammalian cell in the presence of p21 expression in which p21 expression has been induced in step (a) for p21-mediated repression or induction of a cellular gene that is repressed or induced by p21 gene expression; and
  - (c) identifying a compound <u>as a compound</u> that promotes <u>p21-induced p21-mediated induction of</u> senescence-associated changes in cellular gene expression of <u>if</u> a <u>the</u> gene that is repressed by p21 is repressed <u>to a greater extent</u> in the presence of the compound, or <u>if</u> a <u>the</u> gene that is induced by p21 is induced <u>to a greater extent</u> in the presence of the compound.
- 27. (Currently amended) The method of claim 26, wherein the mammalian cell is assayed for a the cellular gene that is induced by p21.
- 28. (Canceled)
- 29. (Currently amended) The method of claim 26, wherein expression of the cellular gene is detected assayed using an immunological reagent.

Application No.: 10/801,207

Reply to Office Action mailed March 20, 2008

Page 4 of 9

- 30. (Currently amended) The method of claim 26, wherein expression of the cellular gene is detected by assaying assayed for an activity of the cellular gene product.
- 31. (Currently amended) The method of claim 26, where expression of the cellular gene is detected assayed by hybridization of cellular RNA to a nucleic acid complementary to the cellular gene.
- 32-38. (Canceled)